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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,975

02/18/2005

Hiroshi Ito

U 015637-2

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01/04/2008

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EXAMINER

NILAND, PATRICK DENNIS

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

01/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/524,975

Applicant(s)

ITO ET AL.

Examiner

Patrick D. Niland

Art Unit

1796

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/05, 11/05</u> | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. It is unclear what is intended by the quotation marks around the various phrases in the claims.

B. It is unclear what "repeating unit structure (I)" and "repeating unit structure (II)" are required to be because they are not defined in the claims.

C. The term "low-molecular" in claim 4 is a relative term which renders the claim indefinite. The term "low-molecular" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is therefore unclear what the scope of "low-molecular" is intended to be.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 and 8-18 are rejected under 35 U.S.C. 102(b) as being anticipated by  
WO 99/50365 Yeates et al..

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Yeates discloses the instantly claimed compositions at the abstract; page 1, lines 1-36, particularly 23-29; page 2, lines 1-38, particularly 5-21, of which the partial neutralization gives the instantly claimed structures I and II; page 3, lines 1-37, particularly 1-10; page 6, lines 1-39, particularly 19-24; page 7, lines 1-39, particularly 15-31, more particularly lines 17-18, which fall within the scope of the instant claim 4, lines 23-24 of which the polyalkylene glycols fall within the scope of the instant claim 3, and line 28, which falls within the scope of the instant claim 2; page 9, lines 4-19, particularly 14-19, where the buffers that give the alkaline pHs fall within the scope of the instant claims 13-14; and the remainder of the document. Given the lack of specificity of the claimed structures I and II of the instant claims, the polymers of the reference can be divided into any structures desired so as to meet the limitations of the instant claims 5-6 and 11-12. Polymers are a mixture of varying molecules as evidenced by average polymer concepts such as molecular weight, functionality, and monomer distribution. Since the instant claims 15-16 do not specify the polymers of these claims, some portion of the polyacrylate of the reference may be taken that meets the limitations of these claims. The ink jet printed and resulted printed substrate of the reference meet the instant claims 17-18.

5. Claims 1-6 and 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/50365 Yeates et al..

Yeates discloses the instantly claimed compositions at the abstract; page 1, lines 1-36, particularly 23-29; page 2, lines 1-38, particularly 5-21, of which the partial neutralization gives the instantly claimed structures I and II; page 3, lines 1-37, particularly 1-10; page 6, lines 1-39, particularly 19-24; page 7, lines 1-39, particularly 15-31, more particularly lines 17-18, which fall within the scope of the instant claim 4, lines 23-24 of which the polyalkylene glycols fall

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within the scope of the instant claim 3, and line 28, which falls within the scope of the instant claim 2; page 9, lines 4-19, particularly 14-19, where the buffers that give the alkaline pHs fall within the scope of the instant claims 13-14; and the remainder of the document. Given the lack of specificity of the claimed structures I and II of the instant claims, the polymers of the reference can be divided into any structures desired so as to meet the limitations of the instant claims 5-6 and 11-12. Polymers are a mixture of varying molecules as evidenced by average polymer concepts such as molecular weight, functionality, and monomer distribution. Since the instant claims 15-16 do not specify the polymers of these claims, some portion of the polyacrylate of the reference may be taken that meets the limitations of these claims. The ink jet printed and resulted printed substrate of the reference meet the instant claims 17-18.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the above discussed combinations of ingredients and amounts thereof because they are encompassed by the reference and would have been expected to give the printing properties described by Yeates. There are no unexpected results seen which are demonstrated in a manner commensurate in scope with the instant claims and the cited prior art.

6. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/50365 Yeates et al. in view of EP 0899311 A1 Yamazaki et al..

Yeates discloses the instantly claimed compositions at the abstract; page 1, lines 1-36, particularly 23-29; page 2, lines 1-38, particularly 5-21, of which the partial neutralization gives the instantly claimed structures I and II; page 3, lines 1-37, particularly 1-10; page 6, lines 1-39, particularly 19-24; page 7, lines 1-39, particularly 15-31, more particularly lines 17-18, which fall within the scope of the instant claim 4, lines 23-24 of which the polyalkylene glycols fall

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within the scope of the instant claim 3, and line 28, which falls within the scope of the instant claim 2; page 9, lines 4-19, particularly 14-19, where the buffers that give the alkaline pHs fall within the scope of the instant claims 13-14; and the remainder of the document. Given the lack of specificity of the claimed structures I and II of the instant claims, the polymers of the reference can be divided into any structures desired so as to meet the limitations of the instant claims 5-6 and 11-12. Polymers are a mixture of varying molecules as evidenced by average polymer concepts such as molecular weight, functionality, and monomer distribution. Since the instant claims 15-16 do not specify the polymers of these claims, some portion of the polyacrylate of the reference may be taken that meets the limitations of these claims. The ink jet printed and resulted printed substrate of the reference meet the instant claims 17-18.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the above discussed combinations of ingredients and amounts thereof because they are encompassed by the reference and would have been expected to give the printing properties described by Yeates and to use carbon black of the instant claim 7 therein because carbon black is encompassed by the broadly claimed "colorant" of the claims of Yeates, e.g. claim 1, and is shown by Yamazaki to be a conventional black colorant for acrylic based ink jet inks which is expected to contribute its well known colorant properties to the inks of Yeates.

There are no unexpected results seen which are demonstrated in a manner commensurate in scope with the instant claims and the cited prior art.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D Niland  
Primary Examiner  
Art Unit 1796